



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243
1-888-891-8332 (TDEC)

Municipal Separate Storm Sewer System (MS4) Annual Report

1. MS4 INFORMATION

City of Kingsport	TNS075388
Name of MS4	MS4 Permit Number
Stephen Robbins, P.E.	steverobbins@kingsporttn.gov
Name of Contact Person	Email Address

(423)245-2167
Telephone (including area code)

225 W. Center St.
Mailing Address

Kingsport	TN	37660
City	State	ZIP code

What is the current population of your MS4? 51,400

What is the reporting period for this annual report? From 7/1/14 to 6/30/15

2. WATER QUALITY PRIORITIES (SECTION 3.1)

- A. Does your MS4 discharge into waters listed as impaired on TN's most current 303(d) list and/or according to the on-line GIS mapping tool? ☒ Yes ☐ No
- B. If yes, please attach a list all impaired waters within your jurisdictional area.
- C. Does your MS4's jurisdictional area contain any waterbodies where a TMDL has been approved for parameters other than pathogens, siltation and habitat alterations? If yes, please attach a list. ☐ Yes ☒ No
- D. Does your MS4 discharge to any Exceptional TN Waters (ETWs) or Outstanding National Resource Waters (ONRWs)? If yes, please attach a list. ☐ Yes ☒ No
- E. Are you implementing additional specific provisions to ensure the continued integrity of ETWs or ONRWS located within your jurisdiction? ☐ Yes ☒ No

3. PROTECTION OF STATE OR FEDERALLY LISTED SPECIES (SECTION 3.2.1 General Permit for Phase II MS4s)

- A. Are there any state or federally listed species within the MS4's jurisdiction? ☒ Yes ☐ No
- B. Are any of the MS4 discharges or discharge-related activities likely to jeopardize any state or federally listed species? ☐ Yes ☒ No
- C. Please attach any authorizations or determinations by U.S. Fish & Wildlife Service on the effect of the MS4 discharges on state or federally listed species.

4. PUBLIC EDUCATION AND PUBLIC PARTICIPATION (SECTION 4.2.1 AND 4.2.2)

- A. Have you developed a Public Information and Education plan (PIE)? ☒ Yes ☐ No
- B. Is your public education program targeting specific pollutants and sources of those pollutants, such as Hot Spots? ☒ Yes ☐ No

Impaired Water	Impairment	Approved TMDL	MS4 Assigned to WLA
Little Horse Creek	Alteration in stream-side vegetative cover. Loss of biological integrity due to siltation. Escherichia coli.	No	Yes
Horse Creek	Alteration in stream-side vegetative cover.	No	Yes
Unnamed Tributary to South Fork Holston River	Alteration in stream-side vegetative cover. Loss of biological integrity due to siltation. Escherichia coli.	Yes	No
Fall Creek	Alteration in stream-side vegetative cover. Loss of biological integrity due to siltation. Escherichia coli.	No	Yes
Unnamed Tributary to Reedy Creek	Physical substrate habitat alterations. Loss of biological integrity due to siltation.	No	Yes
Unnamed Tributary to Reedy Creek (Leslie Branch)	Alterations in stream-side vegetative cover. Loss of biological integrity due to siltation. Escherichia coli.	No	Yes
Clark Branch	Loss of biological integrity due to siltation. Escherichia coli.	No	Yes
Gravelly Creek	Alterations in stream-side or littoral vegetative cover. Nitrate+Nitrite.	No	Yes
Miller Branch	Loss of biological integrity due to siltation. Escherichia coli	No	Yes
Gammon Creek	Alteration in stream-side vegetative cover. Nitrate+Nitrite. Low dissolved oxygen. Loss of biological integrity due to siltation. Escherichia coli.	Yes	Yes
Timbertree Branch	Loss of biological integrity due to siltation. Alterations in stream-side vegetative cover. Escherichia coli.	No	No
Booher Creek	Escherichia coli	No	No
Unnamed Tributary to South Fork Holston River	Alterations in stream-side vegetative cover. Loss of biological integrity due to siltation. Escherichia coli.	Yes	No

South Fork Holston River	Low dissolved oxygen. Habitat loss due to stream flow alterations. Thermal modifications.	No	No
Wagner Creek	Alteration in stream-side vegetative cover. Loss of biological integrity due to siltation. Escherichia coli.	Yes	Yes
Kendrick Creek	Alterations in stream-side or littoral vegetative cover. Escherichia coli.	No	Yes
Rock Springs Branch	Alterations in stream-side or littoral vegetative cover.	No	Yes
Madd Branch	Physical substrate habitat alterations. Escherichian coli.	Yes	Yes
Tranbarger Branch	Other anthropogenic habitat alterations. Escherichia coli.	Yes	Yes
Reedy Creek	Loss of biological integrity due to siltation. Other anthropogenic habitat alterations. Escherichia coli.	Yes	Yes
Gaines Branch	Alterations in stream-side or littoral vegetative cover.	No	Yes
Russell Creek	Escherichia coli	No	No
Bear Creek	Alteration in stream-side or littoral vegetative cover. Escherichia coli.	No	No



United States Department of the Interior

FISH AND WILDLIFE SERVICE

446 Neal Street
Cookeville, TN 38501

June 11, 2014

Mr. Dan Wankel, P.E.
Stormwater Services
City of Kingsport
1644 Fort Henry Drive
Kingsport, Tennessee 37664

Re: FWS #14-EC-0065

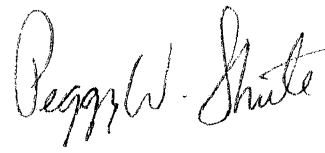
Dear Mr. Wankel:

Thank you for your e-mail received May 15, 2014, regarding compliance with the Endangered Species Act (ESA) in reporting requirements for the City of Kingsport Small MS4 permit (TNS075388) program in Sullivan and Hawkins Counties, Tennessee. We appreciate the detailed information regarding your specific program requirements, regulations, and monitored outfall locational data. U.S. Fish and Wildlife Service personnel have reviewed this information and offer the following comments.

Review of our endangered species database indicates that the federally threatened spotfin chub (*Erimonax monachus*) may occur in the Moccasin Creek and North Fork Holston River watersheds in the northern portions of Kingsport. Also, two insects presently considered to be a "species of concern" (Sevier snowfly and Cherokee clubtail) are also known from small streams or wetlands within or adjacent to your jurisdictional boundaries. All of these aquatic species benefit from MS4 practices that improve water and habitat quality. In addition to the aquatic species listed above, you should be aware that, while there are presently no known records in your jurisdiction, the recently proposed federally endangered Northern long-eared bat (*Myotis septentrionalis*) and endangered Indiana bat (*Myotis sodalis*) may be found in trees with appropriate summer roost habitat within your jurisdiction. We appreciate the efforts of Kingsport's stormwater management program in helping to ensure that the quantity and quality of stormwater discharges from development activities in upland areas protect the water quality of the receiving streams within your jurisdictional boundaries and in downstream areas.

Thank you for the opportunity to comment. If you have any questions, please contact Steve Alexander of my staff at 931/528-6481, ext. 210, or via e-mail at steven_alexander@fws.gov.

Sincerely,


for Mary E. Jennings
Field Supervisor

XC: Robert Karesh, TDEC, Nashville
Paul Higgins, TDEC, Nashville

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C. If yes, what are the specific causes, sources and/or pollutants addressed by your public education program? MS4 and construction site runoff; illicit discharges targeting septage, sediment, oil and grease; professional chemical applicators of pesticides, herbicides and fertilizer; automotive-related fluids and illegal dumping.

D. Note specific successful outcome(s) (NOT tasks, events, publications) fully or partially attributable to your public education program during this reporting period. Continued downward trend in amount of debris collected during stream cleanups; increase in public input stemming from website, hotline, handouts, public signage and hearings.

E. Do you have an advisory committee or other body comprised of the public and other stakeholders that provides regular input on your stormwater program? ☐ Yes ☒ No

F. How do you facilitate, advertise, and publicize public involvement and participation opportunities? Notices of public hearings, recognitions of achievement, workshops, and school activities are published in the newspaper and/or online. Household Hazardous Waste Roundup flyers are distributed to target audiences.

G. Do you have a webpage dedicated to your stormwater program? ☒ Yes ☐ No
If so, what is the link/URL: http://publicworks.kingsporttn.gov/stormwater-management

H. Are you tracking and maintaining records of public education, outreach, involvement and participation activities? Please attach a summary of these activities. ☒ Yes ☐ No

5. ILLICIT DISCHARGE DETECTION AND ELIMINATION (SECTION 4.2.3)

A. Have you completed a map of all outfalls and receiving waters of your storm sewer system? ☒ Yes ☐ No

B. Have you completed a map of all storm drain pipes of storm sewer system? ☐ Yes ☒ No

C. How many outfalls have you identified in your system? 920

D. Have any of these outfalls been screened for dry weather discharges? ☒ Yes ☐ No

F. What is your frequency for screening outfalls for illicit discharges? Once each permit cycle

G. Do you have an ordinance that effectively prohibits illicit discharges? ☒ Yes ☐ No

H. During this reporting period, how many illicit discharges/illegal connections have you discovered (or been reported to you)? 6

I. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated? 4

6. CONSTRUCTION SITE STORMWATER RUNOFF (SECTION 4.2.4)

A. Do you have an ordinance or adopted policies stipulating:

Erosion and sediment control requirements? ☒ Yes ☐ No

Other construction waste control requirements? ☒ Yes ☐ No

Requirement to submit construction plans for review? ☒ Yes ☐ No

MS4 enforcement authority? ☒ Yes ☐ No

B. How many active construction sites disturbing at least one acre were there in your jurisdiction this reporting period? 58

C. How many of these active sites did you inspect this reporting period? 56

D. On average, how many times each, or with what frequency, were these sites inspected Monthly (e.g., weekly, monthly, etc.)?

NPDES BMP Permit Requirements

1) PUBLIC EDUCATION AND PUBLIC PARTICIPATION

BMP 1A

GOAL	<i>Provide multi-media messages about stormwater issues to the public.</i>
ACTION 1:	<i>Participate in Tennessee Association of Broadcaster (TAB) program.</i>
ACTION 2:	<i>Newspaper Articles</i> Rain barrel workshop; Meadow Garden wetlands project; Stormwater Management Award; Public Meeting notices
ACTION 3:	<i>Television/Radio</i> Local cable access; AM Tri-Cities
ACTION 4:	<i>Tennessee Stormwater Association</i> Use state-wide organization's newsletters and website to promote stormwater topics and events
ACTION 5:	<i>Brochures/Handouts</i> Single/small lot development requirements; Annual Household Hazardous Waste Roundup

BMP 1B

GOAL	<i>Increase public participation and input.</i>
ACTION 1:	<i>Stormwater Hotline.</i> Provide telephone access dedicated to stormwater-related complaints and issues. Kingsport public works website w/ contact information for public complaint submittal and referral.
ACTION 2:	<i>Stormy Campaign</i> Implement 'stormwater protector' wireless game; Mascot appearances; Use logo wherever appropriate

ACTION 3:	Holston River Watershed Alliance
	<i>Re-establish local partnership with leadership to enhance community-based activities</i>
ACTION 4:	Events
	Stream cleanups, Rain barrel workshop; Kiwanis presentation; Preston Hills Presbyterian Church presentation; BMA presentation and update on projects and funding
ACTION 5:	Stormwater Advisory Committee
	Provide cross section of community partners to provide guidance in policy and implementation

BMP 1C

GOAL	<i>Increase awareness in targeted City schools and classrooms.</i>
ACTION 1:	<i>Distribute "Discover the Waters of Tennessee" workbook to all 4th graders.</i>
	Approximately 550 copies are distributed to the Kingsport City School System fourth graders annually
ACTION 2:	Events
	Stormy campaign; Trout in the Classroom project; Washington Elementary day; Robinson Middle School field days; STREAM Camp
ACTION 3:	Projects
	Working with superintendent to incorporate stormwater-related upgrades into operation and maintenance program.

BMP 1D

GOAL	<i>Provide internet-based, comprehensive public information City website.</i>
ACTION 1:	<i>Maintain and upgrade City's stormwater pages.</i>
	The website contains updated information on stormwater program activities, water quality issues, regulatory requirements, educational materials, project updates and public participation opportunities.
ACTION 2:	

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- E. Do you prioritize certain construction sites for more frequent inspections? ☒ Yes ☐ No
If Yes, based on what criteria? During beginning and/or critical stages, discharge to impaired streams, proximity to environmentally sensitive areas and hot spots

7. PERMANENT STORMWATER CONTROLS (SECTION 4.2.5)

- A. Do you have an ordinance or other mechanism to require:
- | | | |
|---|---|--|
| Site plan reviews of all new and re-development projects? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Maintenance of stormwater management controls? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Retrofitting of existing BMPs with green infrastructure BMPs? | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
- B. What is the threshold for new/redevelopment stormwater plan review? (e.g., all projects, projects disturbing greater than one acre, etc.) All projects
- C. Have you implemented and enforced performance standards for permanent stormwater controls? ☒ Yes ☐ No
- D. Do these performance standards go beyond the requirements found in Section 4.2.5.2 and require that pre-development hydrology be met for:
- | | | |
|----------------------|---|-----------------------------|
| Flow volumes | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Peak discharge rates | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Discharge frequency | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Flow duration | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
- E. Please provide the URL/reference where all permanent stormwater management standards can be found.
<http://publicworks.kingsporttn.gov/files/publicworks/Stormwater-Management-Manual.pdf>
- F. How many development and redevelopment project plans were reviewed for this reporting period? 11
- G. How many development and redevelopment project plans were approved? 10
- H. How many permanent stormwater management practices/facilities were inspected? 153
- I. How many were found to have inadequate maintenance? 12
- J. Of those, how many were notified and remedied within 30 days? (If window is different than 30 days, please specify) Six. The remainder are on compliance schedules or will be maintained by the MS4
- K. How many enforcement actions were taken that address inadequate maintenance? 5
- L. Do you use an electronic tool (e.g., GIS, database, spreadsheet) to track post-construction BMPs, inspections and maintenance? ☒ Yes ☐ No
- M. Do all municipal departments and/or staff (as relevant) have access to this tracking system? ☒ Yes ☐ No
- N. Has the MS4 developed a program to allow for incentive standards for redeveloped sites? ☒ Yes ☐ No
- O. How many maintenance agreements has the MS4 approved during the reporting period? 7

8. CODES AND ORDINANCES REVIEW AND UPDATE (SECTION 4.2.5.3)

- A. Is a completed copy of the EPA Water Quality Scorecard submitted with this report? ☒ Yes ☐ No

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- B. Include status of implementation of code, ordinance and/or policy revisions associated with permanent stormwater management. Scorecard completed 5/19/12, establishing initial baseline. Review and updates will be incorporated into revised ordinance(s) or policy(ies).

9. STORMWATER MANAGEMENT FOR MUNICIPAL OPERATIONS (SECTION 4.2.6)

- A. Have stormwater pollution prevention plans (or an equivalent plan) been developed for:
- | | | |
|---|---|-----------------------------|
| All parks, ball fields and other recreational facilities | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal turf grass/landscape management activities | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal vehicle fueling, operation and maintenance activities | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal maintenance yards | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal waste handling and disposal areas | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
- B. Are stormwater inspections conducted at these facilities? ☒ Yes ☐ No
1. If Yes, at what frequency are inspections conducted? Quarterly
- C. Have standard operating procedures or BMPs been developed for all MS4 field activities? (e.g., road repairs, catch basin cleaning, landscape management, etc.) ☒ Yes ☐ No
- D. Do you have a prioritization system for storm sewer system and permanent BMP inspections? ☒ Yes ☐ No
- E. On average, how frequently are catch basins and other inline treatment systems inspected? Twice/year
- F. On average, how frequently are catch basins and other inline treatment systems cleaned out/maintained? 2/year
- G. Do municipal employees in all relevant positions and departments receive comprehensive training on stormwater management? ☒ Yes ☐ No
- H. If yes, do you also provide regular updates and refreshers? ☒ Yes ☐ No
- If so, how frequently and/or under what circumstances? No less than annually

10. STORMWATER MANAGEMENT PROGRAM UPDATE (SECTION 4.4)

- A. Describe any changes to the MS4 program during the reporting period including but not limited to:
- Changes adding (but not subtracting or replacing) components, controls or other requirements (Section 4.4.2.a). None
- Changes to replace an ineffective or unfeasible BMP (Section 4.4.2.b). None
- Information (e.g. additional acreage, outfalls, BMPs) on program area expansion based on annexation or newly urbanized areas. Annexed 27.8 acres with 2 outfalls
- Changes to the program as required by the division (Section 4.4.3). None

11. EVALUATING/MEASURING PROGRESS

- A. What indicators do you use to evaluate the overall effectiveness of your Stormwater Management Program, how long have you been tracking them, and at what frequency? Note that these are not measurable goals for individual BMPs or tasks, but large-scale or long-term metrics for the overall program, such as in-stream macroinvertebrate community indices, measures of effective impervious cover in the watershed, indicators of in-stream hydrologic stability, etc.

Indicator	Began Tracking (year)	Frequency	Number of Locations
<i>Example: E. coli</i>	<i>2003</i>	<i>Weekly April–September</i>	<i>20</i>

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E. coli	2011	Once every permit cycle	11
SQSH/VSA	2011	Once every permit cycle	16

B. Provide a summary of data (e.g., water quality information, performance data, modeling) collected in order to evaluate the performance of permanent stormwater controls installed throughout the system. This evaluation may include a comparison of current and past permanent stormwater control practices. Available upon request

12. ENFORCEMENT (SECTION 4.5)

A. Identify which of the following types of enforcement actions you used during the reporting period, indicate the number of actions, the minimum measure (e.g., construction, illicit discharge, permanent stormwater control) or note those for which you do not have authority:

Action	Construction	Permanent Stormwater Controls	Illicit Discharge	Authority?	
Notice of violation	# <u>26</u>	# <u>4</u>	# <u>1</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Administrative fines	# <u>3</u>	#_____	#_____	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Stop Work Orders	#_____	#_____	#_____	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Civil penalties	#_____	#_____	#_____	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Criminal actions	#_____	#_____	#_____	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Administrative orders	# <u>5</u>	#_____	#_____	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Other _____	#_____	#_____	#_____		

B. Do you use an electronic tool (e.g., GIS, data base, spreadsheet) to track the locations, inspection results, and enforcement actions in your jurisdiction? ☒ Yes ☐ No

C. What are the 3 most common types of violations documented during this reporting period? Inspection frequency, documentation and SWPPP implementation

13. PROGRAM RESOURCES (OPTIONAL)

A. What was your annual expenditure to implement the requirements of your MS4 NPDES permit and SWMP this past reporting period? \$2,124,250

B. What is next year's budget for implementing the requirements of your MS4 NPDES permit and SWMP? \$2,150,000

C. Do you have an independent financing mechanism for your stormwater program? ☒ Yes ☐ No

D. If so, what is it/are they (e.g., stormwater fees), and what is the annual revenue derived from this mechanism?

Source: Utility user fee Amount \$2,150,000

Source: Amount \$

E. How many full time employees does your municipality devote to the stormwater program (specifically for implementing the stormwater program vs. municipal employees with other primary responsibilities that dovetail with stormwater issues)? 12

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F. Do you share program implementation responsibilities with any other entities? ☐ Yes ☒ No

Entity	Activity/Task/Responsibility	Your Oversight/Accountability Mechanism

G. Please attach a copy of your Organizational Chart

14. CERTIFICATION

This report must be signed by a ranking elected official or by a duly authorized representative of that person. See signatory requirements in sub-part 6.7.2 of the permit.

"I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

John Clark

Printed Name and Title

John Clark

Signature

9/16/15

Date

Annual reports must be submitted in accordance with the requirements of Section 5.4. (Reporting) of the permit. Annual reports must be submitted to the appropriate Environmental Field Office (EFO) by September 30 of each calendar year, as shown in the table below:

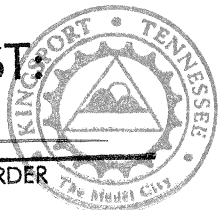
EFO	Street Address	City	Zip Code	Telephone
Chattanooga	540 McCallie Avenue STE 550	Chattanooga	37402	(423) 634-5745
Columbia	1421 Hampshire Pike	Columbia	38401	(931) 380-3371
Cookeville	1221 South Willow Ave.	Cookeville	38506	(931) 432-4015
Jackson	1625 Hollywood Drive	Jackson	38305	(731) 512-1300
Johnson City	2305 Silverdale Road	Johnson City	37601	(423) 854-5400
Knoxville	3711 Middlebrook Pike	Knoxville	37921	(865) 594-6035
Memphis	8383 Wolf Lake Drive	Bartlett	38133	(901) 371-3000
Nashville	711 R S Gass Boulevard	Nashville	37216	(615) 687-7000

APPROVED AS TO FORM:

J. Michael Blyden
CITY ATTORNEY

ATTEST:

[Signature]
CITY RECORDER



STORMWATER ORGANIZATION

MANAGEMENT

- Compliance, Direction, Development
- Consultation, Communication, Supervision
- Training, Public Education/Involvement
- Ordinance development/enforcement
- Policy development/enforcement
- Plan review
- Master Planning

SUPPORT

- Data management
- Complaints
- Work orders
- Documentation
- Reports

INFRASTRUCTURE

INSPECTION

- Construction general permits
- Land disturbing activities
- Complaint investigation
- Permanent stormwater mgmt.
- Single/small lot development

SPECIAL PROGRAMS

- Mapping
- Complaint resolution
- Grants
- TMDLs
- Easements
- IDDE
- Retrofits
- Hot spots

MAINTENANCE/OPERATION

- Conveyance systems
- BMPs
- Complaint investigation
- Cleaning/TV inspecton

CONSTRUCTION

- Conveyance systems
- Installation
- Retrofit
- Repair
- Replace